

ABSTRACT

AN IMAGE CODING METHOD AND APPARATUS FOR LOCALISED DECODING AT MULTIPLE RESOLUTIONS

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The method generates a compressed digital image from a original image. The compressed digital image allows random access to portions of the compressed image at a number of resolutions. The original image is first transformed (103) by a multi-level DWT to form a non redundant multiple resolution frequency domain representation of the image. The representation comprises a DC subband and a plurality of high frequency subbands arranged as levels, where each level represents a frequency contribution between adjacent resolutions and where each subband comprises a plurality of tiles. The DC subband is then entropy encoded (104) into the bitstream. The high frequency subbands are next entropy encoded (108,109, and 110) into the bitstream in level order (105,113,114) and tile order (107,111).

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Fig. 1